

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

**Claims 1-2 (canceled)**

1       **Claim 3 (previously presented):** A method for producing a  
2 semi-conducting device comprising at least a first layer doped  
3 with a doping agent and a second layer deposited on said first  
4 doped layer in a single reaction chamber, wherein the  
5 deposition steps of said first and second layers are separated  
6 by an operation for avoiding the contamination of said second  
7 layer by the doping agent, wherein said operation comprises a  
8 dosing of the reaction chamber with a vapour or gas comprising  
9 water, methanol, isopropanol or another alcohol.

1       **Claim 4 (previously presented):** A method for producing a  
2 semi-conducting device comprising at least a first layer doped  
3 with a doping agent and a second layer deposited on said first  
4 doped layer in a single reaction chamber, wherein the  
5 deposition steps of said first and second layers are separated  
6 by an operation for avoiding the contamination of said second  
7 layer by the doping agent, wherein said operation comprises a  
8 dosing of the reaction chamber with a vapour or gas comprising  
9 ammonia, hydrazine or volatile organic amine.

1           **Claim 5 (previously presented):** The method of claim 3,  
2 wherein said dosing is performed at around 0.05 to 100 mbar  
3 and between 100 and 350°C for less than 10 minutes.

1           **Claim 6 (previously presented):** The method of claim 3,  
2 wherein the doped layer is a p-doped layer.

1           **Claim 7 (previously presented):** The method of claim 3,  
2 wherein the doped layer is a n-doped layer.

1           **Claim 8 (previously presented):** The method of claim 6,  
2 wherein said operation is followed by the deposition of a  
3 buffer layer on the p-layer.

1           **Claim 9 (previously presented):** The method of claim 3,  
2 wherein said dosing is followed by a pumping at high vacuum  
3 and between 100 and 350°C for less than 5 minutes.

**Claims 10-13 (canceled)**

1           **Claim 14 (previously presented):** The method of claim 3,  
2 wherein said doping agent on the surface of a substrate is  
3 transformed into stable chemical compounds.

1           **Claim 15 (previously presented):** The method of claim 4,  
2 wherein said dosing is performed at around 0.05 to 100 mbar  
3 and between 100 and 350°C for less than 10 minutes.

1           **Claim 16 (currently amended):** The method of claim 4,  
2 wherein said ~~dosing~~doping agent comprises ~~trimethylborone~~  
3 trimethylboron.